

3. (currently amended) The nanoscale grasping device of claim 2 1 wherein at least one of said grasping elements comprises a carbon nanotube.

4. (currently amended) The nanoscale grasping device of claim 3 wherein said carbon nanotube is integral with one of said electrodes. ~~is grown by a chemical vapor deposition (CVD) technique.~~

5. (currently amended) The nanoscale grasping device of claim 2 wherein at least one of said grasping elements is ~~chemically functionalized~~ adapted to bind specific molecules thereto ~~said grasping element.~~

6. (currently amended) The nanoscale grasping device of claim 2 wherein at least one of said grasping elements is ~~chemically functionalized~~ adapted to bind particles thereto ~~said grasping element.~~

7. (currently amended) The nanoscale grasping device of claim 1 ~~wherein each of said at least three grasping elements is independently supplied with a voltage sufficient to induce electrostatic forces between at least two of said grasping elements, whereby to close or open said grasping elements~~ comprising at least four electrodes on said substrate and at least four grasping elements having their first ends attached to and making electrical connections with different ones of said at least four electrodes,

whereby said second ends of said grasping elements can be moved toward and away from one another by electrostatic forces in response to voltages applied to said at least four electrodes.

8. (currently amended)      The nanoscale grasping device of claim 7 ~~wherein a steady state voltage is applied to at least one of said grasping elements~~ consisting of four electrodes and four grasping elements, with said four electrodes arranged in a rectangular pattern on said substrate.

9. (currently amended)      The nanoscale grasping device of claim 7 further including ~~wherein~~ an oscillating voltage is applied to at least one of said grasping elements.

10. (currently amended)      The nanoscale grasping device of claim 9 ~~wherein the 7~~ further including an oscillating voltage applied to at least ~~one~~ first and second ones of said grasping elements via said electrodes, with the oscillating voltage applied to said first one of said grasping elements being is in phase with the oscillating voltage applied to ~~at least said second one of the remaining~~ grasping elements.

11. (currently amended)      The nanoscale grasping device of claim 9 7 further including an oscillating voltage applied to first and second ones of said grasping elements via said electrodes, wherein the oscillating voltage applied to said first one of ~~at least one of~~ said grasping elements is substantially out of phase with the oscillating

voltage applied to ~~at least one~~ said second one of the ~~remaining~~ said grasping elements.

12. (currently amended) The nanoscale grasping device of claim 1 further including voltages on said electrodes so as to cancel or enhance ~~wherein resonant vibration in of~~ said grasping elements ~~is cancelled by oscillating voltages applied to said grasping~~ elements.

13. Canceled.

14. Canceled.

15. Canceled.

16. Canceled.

17. Canceled.

18. Canceled.

19. (currently amended) The nanoscale grasping device of claim 1 ~~48~~ comprising three of said electrodes and three of said grasping elements wherein the, and further including an oscillating voltage ~~applied to each grasping element is at each of said~~ three electrodes with the voltage at each electrode being substantially 120 degrees out of phase with the voltage at the other electrodes ~~its neighboring grasping elements~~.

20. (currently amended) The nanoscale grasping device of claim 1 wherein said grasping tool comprises four electrodes and four grasping elements, and further wherein including a steady state voltage is applied to ~~two neighboring grasping elements, and the remaining two grasping elements are left at another voltage~~ at two neighboring electrodes and different voltages at the other two electrodes.

21. Canceled.

22. Canceled.

23. Canceled.

24. (currently amended) The nanoscale grasping device of claim 4 7 wherein said grasping tool comprises four electrodes and four grasping elements, and further wherein an oscillating voltages are applied to each of said grasping elements via said electrodes, with each oscillating voltage being substantially 90 degrees out of phase with the other oscillating voltages.

25. Canceled.

26. Canceled.

27. Canceled.

28. (original) The nanoscale grasping device of claim 1, wherein at least one of said grasping elements is adapted for use as a probe in atomic force microscopy and scanning probe microscopy techniques.

29. (original) The nanoscale grasping device of claim 1, wherein at least one of said grasping elements is adapted for use in performing electrical and mechanical analysis of the sample.

30. (New) A nanoscale grasping device according to claim 1 further including oscillating voltages on said electrodes for canceling or enhancing resonant vibration of said grasping elements.

31. (New) A nanoscale grasping device comprising a substrate, three elongate, fibrous, electrically conductive grasping elements projecting outwardly from said substrate, and three electrodes on said substrate for coupling an oscillating voltage to each of said three grasping elements.

32. (New) A nanoscale grasping device according to claim 31 wherein said grasping elements are carbon nanotubes.

33. (New) A nanoscale grasping device according to claim 32 wherein said carbon nanotubes have a diameter in the range of about 20 to about 150 nm and a length in the range of about 20 to about 40 nm.

34. (New) A nanoscale grasping device consisting of a substrate, three or more fibrous electrically conductive grasping elements having first ends that are fixed to separate electrodes on the substrate and second free ends that are spaced from the substrate, each of said grasping elements being separated from each other grasping element by a gap, whereby said free ends may move in a direction to increase or decrease said gaps as a function of electrostatic attraction caused by voltages applied to said electrodes.

35. (New) A method for grasping small objects comprising:

providing a nanoscale grasping device that is characterized by a substrate, three or more elongate electrically conductive grasping elements having first free ends that are spaced from said substrate and second ends that are fixed to and form electrical connections with individual electrodes attached to said substrate; and

positioning said grasping device so that said free ends of said grasping elements surround an object to be grasped; and

applying electrical voltages to said electrodes so as to cause said free ends to move into engagement with said object as a consequence of electrostatic attraction between said grasping elements caused by the applied voltages.

36. (New) Method according to claim 35 wherein an oscillating voltage is applied to each of said grasping elements.

37. (New) Method according to claim 35 wherein the phases of the oscillating voltages are substantially different on all of the grasping elements.

38. (New) Method according to claim 35 wherein said grasping device comprises three grasping elements .

39. (New) Method according to claim 35 wherein said grasping device comprises four grasping elements.

40. (New) Method according to claim 35 wherein said grasping elements are nanofibers.

41. (New) Method according to claim 35 wherein said grasping elements are carbon nanotubes.